March 2002

HSURC BRIEF

A quick read for the busy decision-maker

Conclusive evidence elusive for preventive home care:

Standard definitions, better database needed to assess effectiveness of interventions

Overview

The release of HSURC's study on preventive home care in May 2000 prompted considerable debate among policy-makers, administrators, and front-line providers. Our key message—that there was no evidence light-level support services promote health—was, admittedly, counterintuitive.

At the time, Saskatchewan health districts told us they wanted more information about the effect of this type of home care on outcomes such as quality of life, functional limitations, social support, and informal caregiver burden. Districts also suggested there was wide variation across the province in how home care data were being collected and reported.

We conducted our original study because we had found little published research on the effectiveness of preventive home care. Shortly after we released our results, several other major Canadian studies on the topic were launched. To assess this new evidence and determine the need for a follow-up study by HSURC, we conducted a review of the research literature.

We focused on Canadian studies done since 1997—the last year we looked at in our original project—but also examined relevant international research. We contacted key individuals and organizations to identify unpublished (grey) literature and studies under way but not yet released.

The papers we reviewed differ widely in their assessments of whether light-level support services such as housekeeping, personal care, and meals keep seniors healthy and living independently longer. Some studies support our original findings, while others refute them. All of the studies we looked at—including those that assessed outcomes similar to those we examined in our original study—have limitations that preclude drawing firm conclusions about the effectiveness of preventive home care.

What the latest research suggests

Do preventive interventions keep seniors alive and out of nursing homes longer, and does it save the system money?

A number of major Canadian studies have looked at the same outcomes we examined in our original study. The largest, a Health

Canada-funded quantitative project by researcher Marcus Hollander, found light-level home care clients in British Columbia who lost their housekeeping services as a result of government cuts ended up costing the health system significantly more in the longer run—through increased admissions to long-term care or hospital, and increased use of homemaking services. These clients also had higher rates of mortality than those who continued to receive support.

A second large Canadian study, by Karen Parent, found government cuts to home support services in Ontario had little impact on the number of visits that clients reported making to the doctor, emergency room, or hospital. Her review of administrative data did not show a significant increase in mortality, or admissions to rehabilitation facilities, hospitals, or nursing homes among clients who lost this service.

Do preventive interventions improve seniors' quality of life?

Qualitative and quantitative studies looking at the impact of interventions on seniors' quality of life have reached contradictory conclusions. In her qualitative analysis of government cuts to British Columbia's continuing care program, Georgia Livadiotakis found there were almost as many affected seniors who reported that they were functioning more independently as there were clients who said they were suffering in silence. Her quantitative data, however, showed 28 per cent of clients experienced a decline in their functioning after they were discharged from the program and almost 20 per cent were readmitted to home care at a higher care level and with greater service needs.

Parent found a significant decline in seniors' physical health as a result of the four-month suspension of support services in Ontario. She found a significant improvement in seniors' mental health except among cardiac patients, who showed a significant decline.

Does preventive home care improve seniors' physical functioning?

Two international randomized controlled trials failed to show preventive interventions reduce numbers or severity of falls among clients. However, two out of six studies included in a systematic review of preventive home visits (van Haastregt, 2000) found the intervention significantly reduced falls among seniors. We also found two studies showing preventive home visits slowed the decline in seniors' activities of daily living (ADL) scores.

Does preventive home care lighten the load for family and friends?

Livadiotakis found 14 per cent of clients who had their continuing care cut had to rely on friends and family for assistance. Nearly two-thirds of the informal caregivers Parent and colleagues interviewed in their Ontario study reported an increase in the amount of care they had to provide as a result of temporary government cuts to home support services.

Two qualitative Saskatchewan studies, one conducted in a rural area (Jaffe and Blakley, 1999), the other in an urban setting (Sawatzky and Fowler-Kerry, 2001), found informal caregivers felt caring for their friend or family member prevented them from attending to personal or social activities. Neither study included a comparison group.

Does preventive home care lead to lonely seniors?

Livadiotakis found that, while some seniors felt more isolated after losing their support services, others believed it was the nudge they needed to get out more often and do more tasks for themselves. In Parent's study, the loss of housekeeping services and reductions in personal care had little impact on clients' self-reported ability to participate in social activities.

Does seniors housing boost social interaction?

Several American studies challenge the theory that individuals living in seniors housing are healthier because they have frequent contact with fellow residents. The types of housing evaluated in these studies, however, may not be directly comparable to seniors housing in Saskatchewan. In one study (Tremethick, 2001), seniors residing in an assisted living facility reported having significantly fewer social networks than those living in their own

homes. A second study (Sheehan, 1986) found frail residents of seniors housing received little social support from their fellow residents.

So what do we know now that we didn't know before?

Our literature review provides a comprehensive overview of Canadian studies conducted between 1997 and the present. Despite an increasing amount of research in this area, the jury is still out on the effectiveness of preventive home care in keeping seniors healthy and independent.

There are a number of factors contributing to the equivocal nature of the available evidence. Most of the studies we reviewed looked at the impact of home visits on a client's health outcomes. Although this service is similar to preventive home care, it typically involves an assessment of a senior, followed by treatment designed to address existing health problems and prevent new ones. The results of studies of the effectiveness of preventive *home visits* may not provide an accurate picture of the effectiveness of preventive *home care*.

Similarly, it's difficult to compare the studies that examined outcomes such as quality of life, functional limitations, and caregiver burden because they looked at different client populations, varied in the length of their follow-up, or involved different types of interventions.

Of those papers that looked specifically at preventive home care, only three were Canadian. Each had limitations that preclude drawing definitive conclusions about this type of care:

- Hollander's study groups were not directly comparable even after statistical adjustment.
- Parent's follow-up period was just four months long and she did not have a comparison group.
- Livadiotakis interviewed 137 seniors in a single health region.

Because of the large number of variables that can have an impact on an individual client's outcomes, it's difficult to adjust data to isolate the impact of a preventive service. In most cases clients receive informal care from friends or family, which makes it tough to determine the effects of the formal support provided through the health system.

Finally, overall home care case loads have changed significantly since the time frame we looked at in our original study. The 1991-97 data we used may not reflect today's realities, making it difficult to compare our findings with those of studies based on more recent data. Fiscal pressures have forced health authorities across the country to target home care interventions to higher-level clients being discharged early from hospital or those individuals at greatest risk for admission to long-term care.

Recommendations

Saskatchewan Health should continue to play a lead role in developing, in consultation with health authorities, standard definitions for preventive home care (and all other categories of home care) that spell out explicitly for each the types of services included, service volumes, and expected outcomes.

Our study working group concluded that in the absence of common definitions, a follow-up study by HSURC would not yield new evidence about preventive home care as it is currently delivered.

Since our original study, many Saskatchewan health districts have taken steps to standardize data collection and reporting. They now review case loads using assessment tools such as the Saskatchewan Client Information Profile - Assessment (SCIP-A) to ensure individuals at highest risk and with greatest care needs receive services. HSURC encourages districts to continue these practices.

Saskatchewan Health should develop a new database that is based on common definitions for all aspects of home care and includes expected outcomes.

The new database could then be used to assess the impact of specific interventions (e.g., meals,

light housekeeping) on specific outcomes (e.g., loss of independence, social support) in specific home care populations (e.g., age, disease, functional limitations). Good databases contribute to higher quality quantitative research.

The province's biannual Supportive Services Meeting should be used as the forum for home care managers to monitor and share new developments, research, and tools in the home care field.

This will ensure Saskatchewan home care managers stay abreast of new national and international research on home care.

Future research in this area should focus on identifying the type of intervention or service that works best for specific groups of clients.

Interviewing Saskatchewan home care clients is unlikely to generate new information beyond what has already been collected in previous qualitative research. Qualitative studies are useful for gaining a better understanding of a health intervention or service, identifying possible trends, formulating hypotheses, or interpreting quantitative findings. However, quantitative research is required to reliably assess the effectiveness of preventive home care. To draw clear conclusions about light-level support services, researchers must conduct studies that disentangle the influences of specific interventions on specific client groups.

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For further information

For a copy of our full literature review on preventive home care, contact the HSURC office by e-mail (zieglerv@hsurc.sk.ca), telephone (306-655-1500), fax (306-655-1462), or visit our Website at www.hsurc.sk.ca